

# **DENIAL AND GRANT OF PETITIONS TO RECONSIDER THE AMENDMENTS TO NATIONAL AIR TOXICS EMISSION STANDARDS AND NEW SOURCE PERFORMANCE STANDARDS FOR PORTLAND CEMENT MANUFACTURING**

## **FACT SHEET**

### **ACTION**

- On May 11, 2011, the U.S. Environmental Protection Agency (EPA) issued a notice granting reconsideration of certain minor technical aspects of its August 2010 air toxics standards and new source performance standards (NSPS) for Portland cement manufacturing. In the same action, the agency also denied reconsideration of several other aspects of the rules, including requests to reconsider the major emission limits contained in the rules.
- EPA took the action based on a thorough review of reconsideration petitions submitted by industry and environmental groups. The Agency will reconsider aspects of the rules it determined did not receive adequate opportunity for public notice and comment, along with several issues raised by industry that the agency believes may have technical merit.
- Both rules will remain in place while EPA reconsiders these minor issues, to ensure that public health protections resulting from these rules are not delayed. Combined, the two rules are expected to dramatically cut harmful emissions of mercury, particle pollution and other pollutants. The combined benefits of the two rules significantly outweigh costs, yielding an estimated \$7 to \$19 in public health benefits for every dollar in costs.
- Mercury can damage children's developing brains, and particle pollution is linked to a wide variety of serious health effects, including aggravated asthma, heart attacks, and premature death. Portland cement manufacturing is one of the largest sources of mercury air emissions in the United States
- EPA is denying reconsideration of the following issues, among others:
  - Whether EPA must recalculate the standards for sources that were cement kilns when EPA issued the August 2010 final rules in light of later rules (a February 2011 rule defining which non-hazardous secondary materials are considered solid waste when burned in combustion units).
  - Startup, shutdown and malfunction standards (with the exception of the monitoring requirements and the hydrogen chloride limit during startup for facilities with wet scrubbers)
  - Particulate matter limits (except for the combined flow formula and the NSPS PM limit for modified kilns, which EPA will reconsider).
  - Monitoring provisions and their applicability to monovents.
- The Agency also is denying a request for an administrative stay of the final rules.
- EPA is granting reconsideration of the following issues/aspects of the rules, among

others:

- Standards for open clinker storage piles.
- The methods for establishing site-specific compliance requirements for kilns that choose to comply with an organic air toxics limit as an alternative the total hydrocarbon limit.
- Monitoring requirements during startup and shutdown.
- The affirmative defense for exceedances of emission limits that are caused by malfunctions.
- Whether to allow dry scrubbing systems to use hydrogen chloride (HCl) stack testing methods as an alternative to HCl continuous monitors.
- The formula used to calculate the PM limit for combined kiln, clinker cooler, and coal mill exhaust streams, and the NSPS PM limit for modified kilns.
- The HCl emission limit of zero during startup for facilities that have wet scrubbers.
- The NSPS for particulate matter emitted by modified cement kilns.

## **BACKGROUND**

- On August 6, 2010, EPA issued amendments to two rules that will significantly reduce emissions of mercury and other air toxics and particle-forming pollutants from new and existing Portland cement kilns across the United States. The rules also will limit emissions of ozone- and particle-forming pollutants from new kilns.
- EPA's amended *air toxics standards* will reduce air emissions of mercury, non-dioxin organic air toxics (measured as total hydrocarbons), hydrochloric acid and non-mercury toxic metals (measured as particulate matter) from both new and existing cement kilns. The rules apply both to large and small kilns that emit toxic air pollutants. Air toxics, also known as hazardous air pollutants, are known or suspected to cause cancer or other serious health effects.
- The Agency's amended *new source performance standards* will reduce nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>) and particulate matter from new kilns. NO<sub>x</sub> and SO<sub>2</sub> both are harmful to health, and they react in the air to form other harmful pollutants. NO<sub>x</sub> contributes to the formation of ground-level ozone and fine particle pollution, two of the pollutants most commonly found across the U.S. SO<sub>2</sub> contributes to fine particle pollution.
- Following publication of the amended rules in the Federal Register on Sept. 9, 2010, EPA received four petitions for reconsideration. The petitions were filed by: Earthjustice; the Portland Cement Association and several companies; Eagle Materials; and the Natural Resources Defense Council.
- Portland cement manufacturing is an energy-intensive process that grinds and heats a mixture of raw materials such as limestone, clay, sand and iron ore in a rotary kiln. That product,

called clinker, is cooled, ground and then mixed with a small amount of gypsum to produce concrete. Pollutants are emitted from the burning of fuels and heating of the raw materials. Emissions also can occur from the grinding, cooling and materials-handling steps in the manufacturing process.

### **FOR MORE INFORMATION**

- To download a copy of the reconsideration notice, go to EPA's website at <http://www.epa.gov/ttn/oarpg/t3pfpr.html>.
- For technical information about the rule contact Keith Barnett of EPA's Office of Air Quality Planning and Standards at (919) 541-5605 or [Barnett.Keith @epa.gov](mailto:Barnett.Keith@epa.gov).
- Additional information on Portland cement manufacturing is available at <http://www.epa.gov/ttn/atw/pcem/pcempg.html>.